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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/245,499 02/05/99 KHANDROS

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EXAMINER

MMC2/0809

FORMFACTOR, INC.
LEGAL DEPARTMENT
5666 LA RIBERA STREET
LIVERMORE CA 94550

CUNEO, K

ART UNIT

PAPER NUMBER

2841

DATE MAILED:

08/09/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

9/245499

Applicant(s)

Examiner

Cuneo

Group Art Unit

2841

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☒ Responsive to communication(s) filed on 7/2/01
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 115-116, 123-131 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 115-116, 123-131 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

- ☒ The proposed drawing correction, filed on 7/2/01 is ☐ approved ☒ disapproved.
- ☒ The drawing(s) filed on 2/5/99 is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some* ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. _____
- ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 30 (2 pages) ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892 ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948 ☐ Other _____

Office Action Summary

DETAILED ACTION

IDS

1. The IDS received 7/2/01 was not accompanied by any references. Examiner has obtained and considered the US references, but is unable to locate the foreign references and the nonpatent literature. Please submit a copy of the foreign patents and the nonpatent literature so that the examiner can consider them. If applicant had included references with the IDS, examiner sincerely apologizes for any inconvenience this second submission will cause.

Drawings

2. The drawings are objected to by the examiner for improper cross hatching. All the parts shown in section should be cross hatched according to MPEP 608.02, page 600-81.

The drawings are also objected to because those figures showing that which is old are **not** labeled with a prior art legend. Such a label is required. See, **for example**, the brief description of figure 1a.

Also, the embodiment of the invention claimed is not shown in the drawings and explained in the detailed description of the invention. An illustration and explanation are required. Please note that all of the features of the elected invention should be shown in a single embodiment. In response to applicant's traversal that figure 8 discloses all of the features, examiner points out that paper #9 elects the species of figures 18, 19 and 21 with the contact of figure 15. One of these figures must contain all of the claimed features or the election changed.

The drawing corrections received 7/2/01 are not approved (therefore, none of the changes are

entered), because figure 1b is described in the specification as old in the art, yet is not labeled with a prior art legend. Moreover, the figures do not include a figure which shows all of the features of the claimed invention in a single drawing. Please note that the elected contacts are those of figure 15: the S-shaped, single-stem contacts. The elected combinations are those of figures 18, 19 and 21. Figure 21 is the only figure which shows the single-stem, S-shaped contacts. But, figure 21 does not show the second substrate which is claimed in claim 131. As such, the claimed subject matter is not shown.

The proposed cross hatching patterns are correct. Examiner suggests adding corrections for figure 1b and the figures to show all of the claimed elements to the corrections of 7/2/01 and resubmitting the corrections. Please submit drawing corrections in compliance with MPEP 608.02(v) in response to this office action.

Treatment of Claims Based on Prior Art

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 115-116, 123-131 are rejected under 35 U.S.C. 102(b) as being anticipated by Kanji et al. (US 5067007, hereafter Kanji).

Kanji discloses a substrate (6) having terminals (8) and flexible, resilient interconnection elements (11), each having an attached end, elongated section and a tip pointing away from the

substrate. See figures 1A, 1C and 1D. The elements have elongated elements of a first material (11A) attached to the terminals and a second material (11B) coating the elongated elements. The first material is flexible without the second material and comprises Cu, column 7 at line 63, and the second material provides resiliency and springability and can be Ni or Au, column 7 at line 65, directly on the first material.

The elongated section has at least one bend as shown for example in figures 1C or 7C. The tip is capable of releasable attachment to a terminal, and Kanji teaches second substrate (1) coupled to the contacts. Please note that the contacts can be detached from the second substrate, therefore they are releasable.

Response to Arguments

5. Applicant's arguments have been carefully reviewed, but are moot in view of the rejection under Kanji.

Please note that the amendment of 7/2/01 and the accompanying arguments are a departure from what applicant indicated was an important aspect of the invention: the contacts being formed directly on the die, see for example the interview summary of 9/12/00.

Conclusion

6. All claims are drawn to the same invention claimed in the parent application prior to the filing of this Request for Continued Examination and could have been finally rejected on the grounds and art of record similar to the final rejection 7/18/00 in paper #15. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing under 37 CFR 1.53(d). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Serial Number: 09/245499
Art Unit: 2841

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Closing

7. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Examiner Kamand Cuneo at (703) 308-1233. Examiner Cuneo's supervisor is Mr. Jeffrey Gaffin whose telephone number is (703) 308-3301.



K. Cuneo
Patent Examiner, Group 2841
July 30, 2001